

ABSTRACT

A set of customized orthodontic brackets are provided with slots that are arranged substantially parallel to the tooth surface. The archwire, in an as-manufactured condition, has a portion of substantial arcuate extent, which is canted relative to the occlusal plane. The brackets are designed on a computer as a combination of three-dimensional virtual objects comprising the virtual bracket bonding pad and a separate virtual bracket body retrieved from a library of virtual bracket bodies. The virtual brackets can be represented as a file containing digital shape data and exported to a rapid prototype fabrication device for fabrication of the bracket in wax or other material and casting the wax prototype in a suitable alloy. Other manufacturing techniques are also contemplated, including milling and laser sintering.